

State of Alaska

Department of Natural Resources

Division of Geological & Geophysical Surveys

Progress Report: Systematic Approach to Assessing the Vulnerability of Alaska's Coastal Infrastructure to

Erosion

Date: July 31, 2020

Period of Reporting: April 1-June 30, 2020

Submitted to: Denali Commission

Objectives and Milestones

		Year 1			
Objectives	Jan-	Apr-	Jul-	Oct-	
	Mar	Jun	Sep	Dec	
Project kickoff, account setup at State of Alaska, and staff hiring		Χ			
Establish data agreements for infrastructure file datasets			Χ	Χ	
Provide initial assessment at pilot sites (Locations: Alakanuk and Kipnuk)				Χ	
	Year 2				
	Jan-	Apr-	Jul-	Oct-	
	Mar	Jun	Sep	Dec	
Publish initial shoreline change assessment as DGGS report of	Χ	Χ	Χ		
investigations					
Provide draft final product to Denali Commission and designated	Χ				
stakeholders for feedback (Locations: Nunam Iqua and Kotlik)					
Project shorelines and build infrastructure projection geodatabases and	Χ	Χ	Χ	Χ	
map products					
Create public-facing data catalog (online map) to track data and reporting		Χ	Χ	Χ	
gaps on flood, erosion, and permafrost hazards for environmentally					
threatened communities.					
	Year 3				
	Jan-	Apr-			
	Mar	Jun			
Publish shoreline projection geodatabases and map products	Х	Χ			
Final report to Denali Commission		Х			

(2000) character limit

DGGS is moving forward with developing Infrastructure Management Planning Assistance for Coastal Towns (IMPACT) model results for 45 communities. Initial results have been completed for Nunam Iqua,

Kotlik, Kaktovik, and Newtok. Moving forward DGGS will complete these analyses for the remaining communities. To meet project timelines, DGGS is hiring a new Geologist I to assist the existing DGGS staff. Hiring has been underway during this project period, with an anticipated start date of approximately August 1, 2020. The additional staff member will not affect the existing budget.

The shoreline change report advanced again in the DGGS review process, however, still not as quickly as anticipated. The report is not yet published, but peer reviews were addressed, and sent on to a copy editor. The timeline has been delayed to an expected publication date in the next quarter. The maps within the report are being provided in draft form upon request for extenuating circumstances, including grant proposals and community decision making meetings.

During this project period, the award was amended to increase the budget and add work line items associated with developing a data catalog that would assist in tracking data and projects associated with flood, erosion, and permafrost hazards for environmentally threatened communities. DGGS has already begun to engage with the ANTHC ETC grants program to determine what fields (types of reports/projects) should be tracked. DGGS has also completed the assessment of data gaps for coastal communities. An ArcGIS story map was created to serve out data and reports in one location and DGGS is receiving feedback on the tool.

Budget Summary

Award amended to increase. On track.

Expenditures:

Total this quarter \$29,027.38

Den. Com. \$27,721.86 (Indirect of \$13,553.12)

Match \$1,305.52